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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/748,939	12/30/2003 Markus A. Wicki		59457US002	1916	
32692 3M INNOVAT	7590 04/02/2007 FIVE PROPERTIES CO	EXAM	EXAMINER		
PO BOX 3342	7	OH, TAY	OH, TAYLOR V		
ST. PAUL, MN 55133-3427			ART UNIT	PAPER NUMBER	
			1625		
			NOTIFICATION DATE	DELIVERY MODE	
			04/02/2007	ELECTRONIC	

## Please find below and/or attached an Office communication concerning this application or proceeding.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

LegalUSDocketing@mmm.com LegalDocketing@mmm.com

# Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
10/748,939	WICKI ET AL.		
Examiner	Art Unit		
Taylor Victor Oh	1625		

			1020					
	The MAILING DATE of this communication appe	ars on the cover sheet with the	correspondence addre	ess				
THE REPLY FILED 08 March 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.								
this plac a R	reply was filed after a final rejection, but prior to or or application, applicant must timely file one of the followes the application in condition for allowance; (2) a Note equest for Continued Examination (RCE) in compliance periods:	wing replies: (1) an amendment, at tice of Appeal (with appeal fee) in	ffidavit, or other evidence compliance with 37 CFF	e, which R 41.31; or (3)				
a) 🔲	The period for reply expiresmonths from the mailing	g date of the final rejection.						
b) 🔀	The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire I Examiner Note: If box 1 is checked, check either box (a) or	ater than SIX MONTHS from the mailir (b). ONLY CHECK BOX (b) WHEN TH	ng date of the final rejection	ı <b>.</b>				
have been under 37 C set forth in may reduce	TWO MONTHS OF THE FINAL REJECTION. See MPEP 7 sof time may be obtained under 37 CFR 1.136(a). The date filed is the date for purposes of determining the period of ex CFR 1.17(a) is calculated from: (1) the expiration date of the soft (b) above, if checked. Any reply received by the Office later e any earned patent term adjustment. See 37 CFR 1.704(b) OF APPEAL	on which the petition under 37 CFR 1. tension and the corresponding amount shortened statutory period for reply origon than three months after the mailing days.	of the fee. The appropriate	e extension fee action: or (2) as				
2. The	Notice of Appeal was filed on A brief in comp g the Notice of Appeal (37 CFR 41.37(a)), or any exte otice of Appeal has been filed, any reply must be filed	nsion thereof (37 CFR 41.37(e)), to	o avoid dismissal of the	of the date of appeal. Since				
	e proposed amendment(s) filed after a final rejection,	but prior to the date of filing a brief	F will not be entered bee	eauso.				
(a) [ (b) [	<ul> <li>They raise new issues that would require further co</li> <li>They raise the issue of new matter (see NOTE belo</li> </ul>	nsideration and/or search (see NC w);	OTE below);					
_	They are not deemed to place the application in being appeal; and/or			e issues for				
](b)	They present additional claims without canceling a NOTE: (See 37 CFR 1.116 and 41.33(a)).		jected claims.					
4. 🔲 The	amendments are not in compliance with 37 CFR 1.1	21. See attached Notice of Non-Co	ompliant Amendment (P	TOL-324).				
5. 🔲 Ap	plicant's reply has overcome the following rejection(s)	:						
non	wly proposed or amended claim(s) would be al -allowable claim(s).			_				
how The Clai	purposes of appeal, the proposed amendment(s): a) the new or amended claims would be rejected is prostatus of the claim(s) is (or will be) as follows: m(s) allowed:	☐ will not be entered, or b) ☐ w vided below or appended.	ill be entered and an exp	olanation of				
Clai	m(s) objected to: m(s) rejected:							
AFFIDAV	m(s) withdrawn from consideration:  IT OR OTHER EVIDENCE							
8.  The beca	affidavit or other evidence filed after a final action, bu ause applicant failed to provide a showing of good and not earlier presented. See 37 CFR 1.116(e).	t before or on the date of filing a N d sufficient reasons why the affida	lotice of Appeal will <u>not</u> t vit or other evidence is n	be entered necessary and				
ente shov	affidavit or other evidence filed after the date of filing ered because the affidavit or other evidence failed to dwing a good and sufficient reasons why it is necessary.	vercome <u>all</u> rejections under appe y and was not earlier presented. S	eal and/or appellant fails See 37 CFR 41.33(d)(1).	to provide a				
<u>REQUES</u>	e affidavit or other evidence is entered. An explanation TFOR RECONSIDERATION/OTHER							
<u>se</u>	e request for reconsideration has been considered bu e pages 2-8.		n condition for allowance	e because:				
12.	te the attached Information Disclosure Statement(s). ner:	(PTO/SB/08) Paper No(s)	•					

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It is noted that applicants have filed an Amendment after the Final Rejection on 3/08/07; applicants' attorney has addressed the issues of record. The applicants' argument will be entered; but, it is not in a condition for allowance.

#### The Status of Claims

Claims 1-2, 4-5, 7-8, 10-11, 13-17, and 20-30 are pending.

Claims 1-2, 4-5, 7-8, 10-11, 13-17, and 20-30 are rejected.

#### Claim Objections

The objection of Claims 1, 27 and 30 has been maintained due to applicants' failure to modify the claimed limitations.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The rejection of Claim 23 under 35 U.S.C. 112, first paragraph, has been maintained due to applicants' failure to modify the claim.

The rejection of Claims 1-2, 4-5, 7-8, 10-11, 13-17, and 20-30 are rejected under 35 U.S.C. 112, first paragraph, has been has been maintained due to applicants' failure to modify the claims.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

The rejection of Claim 26 under 35 U.S.C. 112, second paragraph, has been has been maintained due to applicants' failure to modify the claim.

#### Claim Rejections - 35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

<u>The rejection of Claims 1-2, 4-5, 7-8, 10-11, 13-17, and 20-30 under 35 U.S.C. 103(a)</u>
as being unpatentable over Babler et al (Tetrahedron Letters, 1979, no. 22, p. 1971-74)).

The rejection of Claims 1-2, 4-5, 7-8, 10-11, 13-17, and 20-30 under 35 U.S.C. 103(a) as being unpatentable over Babler et al (Tetrahedron Letters, 1979, no. 22, p. 1971-74) has been maintained with a reason of record on 7/11/06.

### Applicants' Argument

Applicants argue the following issues:

a. the one skilled in the art would recognize that chemistry in the gas phase is very different than chemistry in solution; one skilled in the art would recognize that if the catalysts disclosed in Gardener are used in catalytic amounts, they would work the same way in the claimed process.

b. March's Advanced Organic Chemistry teaches the super acid to be used as a solvent; therefore, if the catalysts disclosed in March's Avanced Organic Chemistry is used in catalytic amounts, it would work the same way in the claimed process.

c.

The Background section of the original specification discusses shortcomings in the prior art, including the shortcoming that many prior art approaches for transforming diols into monoacetates "require specialized equipment such as continuous extraction apparatuses" (page 2, lines 21 – 25). The Summary section of the original specification goes on to explain that Applicants "recognize that in order for a process [for preparing monoacetates from diols] to be commercially viable, it should eliminate the necessity for specialized equipment [i.e., continuous extraction apparatuses]" and that surprisingly the claimed process "does not require specialized equipment [i.e., continuous extraction apparatuses]" (page 3, lines 1 – 9 and 19 – 24). In view of the foregoing, it is clear that Applicants, at the time the application was filed, had possession of the claimed invention, including the negative limitations.

- d. Neither the description of "Preparation of Monoesters nor the examples in the original specification discuss using a continuous extraction step; therefore, applicants had possession of the subject matter(i.e., the negative limitation) in question at the time the present application was filed.
- e. The transitional phrase "comprising" is open-ended and does not exclude additional unrecited elements; therefore, this is not vague and indefinite in the claimed limitation.
- f. Babler does not teach a process for preparing monoesters conducted without a continuous extraction step.

Applicants' arguments have been noted, but the arguments are not persuasive.

First, regarding the first argument, the Examiner has noted applicants' arguments. However,

Gardener (US 3,878,261) clearly does not show the super acid catalyst of SbF<sub>5</sub> and CF<sub>3</sub>SO<sub>3</sub>H

suitable for the esterification process. This is because there is no hint or suggestion about the applicability of the super acid catalyst to the esterification process in the prior art. Also, regardless of the chemical process with the gas phase being different from the liquid, the prior art expressly mention that "isomerization with acid catalysts can be carried out with the catalyst in the liquid phase" (see col. 1, lines 23-24); regarding the use of catalytic amount for the super acid catalyst, the example 1 does display 0.0178 mole of CF<sub>3</sub>SO<sub>3</sub>H and 0.0193 mole of SbF<sub>5</sub> for the heptane isomerization, but not for the esterification process; furthermore, attorney's argument of the predictable outcome from the use of the catalytic amount of Gardener's super acid in the claimed process can not take the place of evidence in the record. *In re DeBlauwe*, 736 F. 2d 699, 705, 22USPQ 191, 196 (Fed. Cir. 1984). Therefore, applicants' argument is not persuasive.

Second, regarding the second argument, the Examiner has noted applicants' arguments. However, regardless of how the super acid, FSO<sub>3</sub>H-SbF<sub>6</sub> is used, March's Advanced Organic Chemistry (see p. 219, the fourth paragraph) expressly teaches that the addition of the super acid, FSO<sub>3</sub>H-SbF<sub>6</sub> to the isobutene gives the tert-butyl cation. This does not advocate to be used in the claimed esterification process. In addition, attorney's argument of the predictable outcome from the use of the catalytic amount of March's super acid in the claimed process can not take the place of evidence in the record. *In re DeBlauwe*, 736 F. 2d 699, 705, 22USPQ 191, 196 (Fed. Cir. 1984). Therefore, applicants' argument is not persuasive.

Third, regarding the third and fourth arguments, the Examiner has noted applicants'

arguments. As applicants have indicated that the list of specialized equipments with technical difficulties and economic burden is mentioned in the background section (see page 2, lines 21-33), one of them happens to be the continuous extraction. Also, applicants emphasize that the summary section of the specification discloses the following facts:

Surprisingly, it has been discovered that the process of the invention can be used to selectively prepare monoesters such as, for example, monoacetates from symmetric diols. The process does not require specialized equipment, and it can be carried out using inexpensive, commercially available reagents.

Therefore, from the aboves, applicants are convinced that it does satisfy the written description of the negative limitation, the "wherein the process does not comprise a continuous extraction step". However, the examiner disagrees with applicants' arguments in view of the following guidance shown in MPEP 2173.05(i) Negative Limitations below:

Any negative limitation or exclusionary proviso must have basis in the original disclosure. If alternative elements are positively recited in the specification, they may be explicitly excluded in the claims. See In re Johnson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977) ("[the] specification, having described the whole, necessarily described the part remaining."). See also Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff 'd mem., 738 F.2d 453 (Fed. Cir. 1984). The mere absence of a positive recitation is not basis for an exclusion. Any claim containing a negative limitation which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Note that a lack of literal basis in the specification for a negative limitation may not be sufficient to establish a prima facie case for lack of descriptive support. Ex parte Parks, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993). See MPEP § 2163 - § 2163.07(b) for a discussion of the written description requirement of 35 U.S.C. 112, first paragraph.

Thus, the negative proviso with this limitation lacks a literal description in the original specification. New matter can not be introduced into specification at any time during the prosecution, unless there is a supporting description that would support the proposed changes.

Applicant is required to cancel the new matter in the reply to this Office Action. Even a negative limitation requires description, *Ex Parte Grasselli*, 231 USPQ 393.

Therefore, applicants' argument is not persuasive.

Fourth, regarding the fifth argument, the Examiner has noted applicants' arguments. However, the phrase "an insect mating disruption product comprising" is still vague and indefinite because the expression of the term "comprising" would mean that there were additional components besides the definitive insect mating disruption product. The examiner recommends to change from "comprising" to "having" or from "insect mating disruption product" to "insect mating disruption composition".

Fifth, regarding the sixth argument, the Examiner has noted applicants' arguments. However, in view of the new matter rejection under 35 U.S.C. 112, first paragraph, the rejection of Claims 1-2, 4-5, 7-8, 10-11, 13-17, and 20-30 under 35 U.S.C. 103(a) as being unpatentable over Babler et al (Tetrahedron Letters, 1979, no. 22, p. 1971-74) has been still maintained.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Taylor Victor Oh whose telephone number is 571-272-0689. The examiner can normally be reached on 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas McKenzie can be reached on 571-272-0670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Taylor Victor Oh, MSD, LAC

3/24/5/

Primary Examiner
Art Unit:1625

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